

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

BIOHAVEN THERAPEUTICS LTD.  
and YALE UNIVERSITY,

Plaintiffs,

v.

AVILAR THERAPEUTICS, INC., a  
Delaware corporation, and RA  
CAPITAL MANAGEMENT GP, LLC,  
a Delaware corporation,

Defendants.

Civil Action No. 1:23-cv-00328-JLH

**JURY TRIAL DEMANDED**

**FIRST AMENDED COMPLAINT**

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Dated: April 5, 2024

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Biohaven Therapeutics Ltd. (“Biohaven”) and Yale University (“Yale”) (collectively, “Plaintiffs”) bring this action against RA Capital Management, LLC and Avilar Therapeutics, Inc. (collectively, “Defendants”) for federal and state trade secret misappropriation and breach of a confidentiality agreement, and allege as follows:

**INTRODUCTION**

1. This action concerns a new therapeutic strategy for treating a wide range of diseases by using specific drug molecules to attack and destroy targeted protein molecules in the body, known as “targeted protein degradation.”

2. A simple cell holds millions of protein molecules, and in the 1980s, researchers discovered the system by which the human body *intracellularly* (inside cells) regulates the concentration of proteins, including, for example, by degrading faulty and misfolded proteins. This natural system involved something called the ubiquitin-proteasome system, whereby proteins

are tagged for degradation by a small protein called ubiquitin, catalyzed by ligase enzymes, and then degraded by proteasomes. Researchers worked to develop therapeutics around this system.

3. Professor David Spiegel, M.D., Ph.D., at Yale University discovered and developed an entirely new approach to targeted protein degradation. Dr. Spiegel discovered a class of modularly designed, bi-functional synthetic molecules, which he called MODA, capable of mediating the degradation of *extracellular* proteins. In particular, these molecules contain a moiety binding the asialoglycoprotein receptor (ASGPR) of liver cells to harness the body's own machinery to degrade targeted proteins. The MODA platform is different from earlier approaches to targeted protein degradation and does not rely on ubiquitin ligases, and different from other approaches to extracellular protein degradation by utilizing ASGPR-binding moieties. Dr. Spiegel obtained the first experimental evidence that synthetic molecules with an ASGPR-binding moiety can be used in targeted protein degradation of extracellular proteins both *in vitro* and *in vivo*. Dr. Spiegel's ground-breaking discovery holds tremendous potential for a broad range of therapeutics for various diseases, including neurological disorders, cancer, infectious diseases, and autoimmune diseases.

4. In early 2019, RA Capital Management Group, LLC ("RA Capital"), a Boston-based venture capital fund focused on healthcare and life science companies, approached Yale and requested a meeting with Dr. Spiegel. In April 2019, Dr. Spiegel pitched his new discovery to RA Capital. At the time, RA Capital had heard that Dr. Spiegel had discovered a novel technology for extracellular protein degradation, but no one at RA Capital knew the details about Dr. Spiegel's discovery of the MODA platform, including the identity or structure of his bi-functional synthetic molecules containing ASGPR-binding moieties to degrade extracellular proteins.

5. RA Capital signed a Confidential Disclosure Agreement with Yale, effective April 10, 2019, that restricted RA Capital's use of any information Yale shared with RA Capital ("2019 Agreement") to "the evaluation of a possible contractual arrangement" between Yale and RA Capital. **Exhibit 1.** After the 2019 Agreement's execution, Dr. Spiegel met with Dr. Milind Deshpande, Dr. Joshua Resnick, and Mr. Ben Dake, each of whom worked for RA Capital, and over a period of months, Dr. Spiegel disclosed the details of his confidential research and discoveries. In PowerPoint decks, spreadsheets, results of laboratory data and other documents, Dr. Spiegel shared with RA Capital confidential information about specific MODA small molecules, target proteins (e.g., [REDACTED])

[REDACTED] From April through July 2019, and after the execution of the 2019 Agreement, Dr. Spiegel confidentially shared numerous documents through Dropbox.com, including confidential patent applications, met with RA Capital a number of times, either in-person or by phone, exchanged numerous emails, and answered a large number of RA Capital's questions about the details of Dr. Spiegel's discovery and research for the purpose of evaluating a potential business arrangement between the parties. Collectively, the confidential information Dr. Spiegel shared with RA Capital during this period comprises the "MODA Trade Secrets."

6. On July 21, 2019, RA Capital sent Dr. Spiegel a term sheet for seed funding for the development of Dr. Spiegel's MODA technology, and in August 2019, Dr. Spiegel sent RA Capital a counter-offer. On or before August 19, 2019, RA Capital sent Dr. Spiegel an email rejecting the counter-offer and terminating further negotiations with Dr. Spiegel and Yale. This termination email ended "the evaluation of a possible contractual relationship" between Yale and RA Capital, and RA Capital therefore had no legitimate purpose for retaining the MODA Trade Secrets.

Unbeknownst to Dr. Spiegel or Yale, after terminating its negotiations with Yale, RA Capital improperly accessed and used the MODA Trade Secrets to assist or accelerate the research and development of extracellular targeted protein degraders.

7. Unbeknownst to Dr. Spiegel or Yale, before the August 19, 2019, termination of negotiations with Yale and while RA Capital still went through the motions of negotiating a possible funding deal with Yale [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

8. Unbeknownst to Dr. Spiegel and Yale, after terminating its negotiations with Yale, RA Capital and Avilar continued to use Dr. Spiegel's MODA Trade Secrets to develop their competing extracellular degrader company.

9. Unbeknownst to Dr. Spiegel and Yale, after terminating its negotiations with Yale, RA Capital funded the creation of Avilar, naming Dr. Deshpande and Dr. Resnick as directors and board members to the new company. Avilar described itself as "pioneering the next frontier in protein degradation by targeting extracellular proteins," the exact mechanism stolen from Dr. Spiegel that uses bi-functional molecules containing a moiety binding the ASGPR receptor for targeted protein degradation. **Exhibit 2.**

10. Unbeknownst to Dr. Spiegel or Yale, after terminating its negotiations with Yale, RA Capital hired a patent attorney, drafted and filed U.S. provisional patent applications directed to Dr. Spiegel's MODA technology, and claimed Dr. Spiegel's MODA Trade Secrets as their own.

Dr. Deshpande of RA Capital was named an inventor on at least one of these patents, and Avilar was named the applicant on each.

11. After RA Capital's patent applications published with Avilar as the applicant on each, Avilar announced that it received \$60 million in funding from RA Capital, **Exhibit 19**, which has since increased to \$75 million, **Exhibit 63**.

12. In around November 2021, Avilar's website went public and Avilar released numerous press releases about the new company. In a news article, the new CEO of Avilar, Daniel Grau, falsely claimed that RA Capital invented and discovered the MODA platform, which Mr. Grau called ASGPR Targeting Chimeras or "ATACs":

The idea behind ATACs started from the simple question in the halls of RA Capital, CEO Dan Grau told Endpoints News: Protein Degraders are great and growing increasingly validated in animals and humans, but can we use the same mechanism outside the cell? That inquiry led the Avilar team to the ASGPR receptor on the surfaces of hepatocytes, a key transit point for liver cells' breaking down endogenous proteins.

**Exhibit 3.** But ATACs did not start in the halls of RA Capital. ATACs originated with the work, development and testing of Dr. Spiegel, who disclosed his proprietary work to RA Capital in 2019 under the protections of the 2019 Agreement.

13. RA Capital and Avilar misappropriated the MODA Trade Secrets, breached the 2019 Agreement, and stole Dr. Spiegel's inventions and discoveries, claiming the technology as their own, and unjustly enriching Defendants.

14. On January 4, 2021, Biohaven signed an agreement with Yale to develop and commercialize the MODA technology, which pertains to the clearance of disease-causing proteins and other biomolecules by targeting them for lysosomal degradation using multi-functional molecules. Defendants' misconduct has harmed the value of Biohaven and the value of the MODA

technology. Further, Defendants' unauthorized use of the MODA Trade Secrets enabled them to generate capital and significantly accelerate and shortcut the development cycle.

### **THE PARTIES**

15. Biohaven is a corporation organized and existing under the laws of the British Virgin Islands, having a principal office at 215 Church Street, New Haven, Connecticut, 06510.

16. Yale is a corporation organized and existing under and by virtue of a charter granted by the general assembly of the Colony and State of Connecticut and located in New Haven, Connecticut, having a principal office at 451 College Street, New Haven, Connecticut, 06511.

17. On information and belief, Avilar is a Delaware corporation with a principal place of business located at 400 Totten Pond Road, Suite 110, Waltham, Massachusetts, 02451.

18. On information and belief, RA Capital Management, LLC, is a Delaware limited liability company with a principal place of business at 200 Berkeley St, 18th Floor, Boston, Massachusetts, 02116.

### **SUBJECT MATTER JURISDICTION AND VENUE**

19. This Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1331 because Plaintiffs assert a claim for misappropriation of trade secrets under the Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836, as amended. This Court has supplemental or pendant jurisdiction over Plaintiffs' claims for breach of contract and misappropriation of trade secrets under the Delaware Uniform Trade Secret Act, 6 Del. C. § 2001, pursuant to 28 U.S.C. § 1367 because the claims are so related to Plaintiffs' federal misappropriation of trade secrets claim that the two form part of the same case or controversy under Article III of the United States Constitution.

20. Venue is proper under 28 U.S.C. § 1391(b) and (c) because Defendants RA Capital and Avilar are incorporated in this district.

## **PERSONAL JURISDICTION**

21. RA Capital is subject to personal jurisdiction in Delaware because, among other things, it is incorporated in Delaware.

22. Avilar is subject to personal jurisdiction in Delaware because, among other things, it is incorporated in Delaware.

## **FACTUAL BACKGROUND**

### **Targeted Protein Degradation**

23. In 2004, three scientists shared the Nobel Prize in chemistry for discovering the ubiquitin proteasome system for intracellular targeted protein degradation, the system used to regulate proteins in the human body. In particular, the scientists discovered and described protein complexes called proteasomes that degrade unneeded or damaged proteins by proteolysis, a chemical reaction that breaks peptide bonds.

24. The ubiquitin proteasome system regulates the concentration of particular proteins and degrades misfolded proteins by a series of reactions. First, proteins are tagged for degradation with another small protein called ubiquitin, which itself is catalyzed by enzymes called ubiquitin ligases. Second, the tagged target protein provides a signal to other ligases to attach additional ubiquitin molecules, creating a polyubiquitin chain that is bound by the proteasome, allowing it to degrade the tagged protein. Third, the degradation process yields peptides of about seven to eight amino acids long, which can then be degraded into shorter amino acid sequences and used in synthesizing new proteins. This process occurs inside cells, i.e., intracellularly.

25. One approach to manipulate this process for therapeutic purposes involves proteolysis targeting chimeras (PROTACs), which rely on ubiquitin ligases. PROTACs are limited to the intracellular targets, leaving many other therapeutically attractive targets outside of cells unable to be degraded.



### Yale's Discovery of MODA

26. Dr. Spiegel and his team at Yale discovered a novel method for targeted cell degradation of proteins circulating extracellularly. He did this with MODA molecules, bi-functional small molecules containing two functional moieties. The first moiety binds to a pathogenic extracellular target protein to be degraded, and is linked to a second moiety that binds to the asialoglycoprotein receptor (ASGPR) of a hepatocyte (or liver cell).



MODA molecules mediate the formation of a ternary complex between a target protein and ASGPR, causing the target protein to be endocytosed and degraded by lysosomal proteases.

27. Starting in or before 2015, Dr. Spiegel and his laboratory at Yale worked on developing molecules, and over a period of years, spent hundreds of thousands of dollars and countless hours designing MODA molecule, identifying uses for them, and testing them.

28. Starting in 2018, Dr. Spiegel and Yale began filing patent applications directed to Dr. Spiegel's discoveries and describing, for the first time, bi-functional molecules designed to degrade circulating, extracellular proteins via the ASGPR, and therapeutics based on the MODA technology, including some of the MODA Trade Secrets. For example, Yale filed provisional patent application No. 62/655,055 on April 9, 2018, and provisional patent application No. 62/788,040 on January 3, 2019.

### The 2019 Confidential Disclosure Agreement with RA Capital

29. Beginning January 2019, RA Capital tried to arrange a meeting between the Managing Partner of RA Capital, Dr. Peter Kolchinsky, and Dr. Spiegel. **Exhibit 21**

(DEFS00096675). RA Capital knew that Dr. Spiegel had developed a new technology targeting proteins, but it did not know how his technology worked.

30. On April 9, 2019, Dr. Spiegel met with RA Capital and presented a PowerPoint deck including high-level information regarding his MODA platform's novel technology. The presentation provided RA Capital with a high-level overview of clinical applications of Dr. Spiegel's technology and the status of the technology's pipeline, and indicated that MODA had achieved *in vivo* proof-of-concept for two targets and cellular proof-of-concept for one additional target. Dr. Spiegel also told RA Capital that Yale had filed two provisional patent applications and that two more applications were being prepared, but Dr. Spiegel did not share the substance of those applications. The PowerPoint deck contained general business terms and limited information relating to the MODA platform, keeping confidential the details of Dr. Spiegel's MODA Trade Secrets. For example, this generic PowerPoint did not describe or identify any bifunctional molecules and did not disclose Dr. Spiegel's use of the ASGPR pathway for mediating protein degradation. RA Capital had no way of knowing how Dr. Spiegel MODA technology degraded extracellular proteins.

31. Immediately after this meeting, RA Capital began negotiating a confidential disclosure agreement with Dr. David A. Lewin, Senior Associate Director, Business Development, of the Yale University Officer of Cooperative Research. Dr. Lewin stated in an April 10, 2019 email, which included Dr. Spiegel and individuals from RA Capital, that Dr. Spiegel's "follow-up from the meeting" was "to provide the non-confidential presentation and any key references (e.g., to IgG depletion indications and/or standards of care) to RA" and that Dr. Lewin's "follow-up" was "to send a CDA for their review." Dr. Spiegel then sent a Dropbox link containing this non-confidential information to RA Capital's Mr. Dake. Mr. Dake responded "Thanks much for

sending this over David. I'm hoping Yale will be able to turn around the CDA quickly." RA Capital therefore understood that it would only receive access to confidential materials after entering into a confidential disclosure agreement with Yale.

32. On April 12, 2019, three days after the initial meeting between RA Capital and Dr. Spiegel, RA Capital and Yale entered into the 2019 Agreement, which was effective April 10, 2019. **Exhibit 1.** As part of their effort to obtain a confidentiality agreement, the parties mutually understood that the information shared was to be kept confidential to protect its value at trade secrets. Because both parties were attempting to enter into a development agreement, it was in both parties' interests to keep any shared information confidential.

### **The Confidential Disclosure Agreement**

33. At all times during the relationship between RA Capital and Yale, all confidential information disclosed by Dr. Spiegel to RA Capital occurred pursuant to confidentiality provisions in the 2019 Agreement protecting the use and disclosure of, among other things, scientific, technical, and product information. The Agreement broadly protects "confidential information" which is defined to include, among other things "any and all information, know-how and data, technical or non-technical, which is not publicly known and which relates to the subject matter named below." **Exhibit 1** at § 1. The Subject Matter is defined as "MODA platform for target degradation." *Id.* Under the 2019 Agreement, the MODA Trade Secrets constitute confidential information because they include, for example, scientific, and technical product information and were designated as confidential.

34. Section 2 of the 2019 Agreement states that RA Capital may use confidential information "for the sole purpose of evaluating a possible contractual relationship between the parties (the 'Purpose'). . . ." *Id.* at § 2. Section 2 of the 2019 Agreement expressly "excludes

using the Confidential Information to create physical, biological, energetic or other forms, or using it to carry out tests, studies, trials, experiments, or similar exploratory or evaluative activities.” *Id.*

35. Section 4 of the 2019 Agreement prohibits RA Capital from disclosing Yale’s confidential information, including the MODA Trade Secrets, to:

any third party not affiliated with [RA Capital] by common ownership . . . and even then only under similar conditions of confidentiality unless (i) YALE agrees otherwise in writing pursuant to a separately negotiated and executed agreement between the parties or (ii) [RA Capital] can demonstrate by competent documentary evidence that the disclosed information:

(a) was known to [RA Capital] prior to the disclosure by Yale; or

(b) is or becomes publicly known through no fault or omission attributable to [RA Capital]; or

(c) is given to [RA Capital] by a third party under no obligation of confidentiality to YALE; or

(d) is independently developed by [RA Capital] without the aid, application or use of such Confidential Information, as established by a preponderance of documentary evidence.

*Id.* at § 4.

36. Section 6 of the 2019 Agreement prohibits RA Capital from disclosing Yale’s confidential information, including the MODA Trade Secrets, to any employees except those who have a need to know of it as part of RA Capital’s evaluation of a potential contractual relationship between Yale and RA Capital. *Id.* at § 6.

37. Section 8 of the 2019 Agreement prohibits RA Capital from making “any use, except for the Purpose, in whole or in part, of such Confidential Information, without YALE’s prior written consent pursuant to a separately negotiated and executed agreement between the parties.” *Id.* at § 8.

38. Section 9 of the 2019 Agreement recites: “[RA Capital] acknowledges and agrees that YALE reserves all rights in and to any technical information and data disclosed under this Agreement and, notwithstanding anything to the contrary, this Agreement shall not constitute a license, assignment, or any other rights expressed or implied nor shall it constitute an option or other right to any such license. . . .” *Id.* at § 9.

39. Section 10 of the 2019 Agreement expressly recites that the 2019 Agreement “shall govern all communications between the parties that are made during the period from the EFFECTIVE DATE of this Agreement to one (1) year from that date. . . .” *Id.* at § 10.

#### **Disclosure of Trade Secrets to RA Capital**

40. The Parties understood that the documents Yale and Dr. Spiegel provided after the execution of the 2019 Agreement were confidential and trade secrets and produced pursuant to the terms of the 2019 Agreement. For example, twelve minutes after receiving the fully executed version of the 2019 Agreement, Dr. Lewin told Dr. Spiegel—in an email that included Dr. Deshpande and other RA Capital employees—“David, you can provide necessary diligence documents, as may be requested by RA Capital.” Ten days later, on April 22, 2019, Mr. Dake responded to this email and wrote to Dr. Spiegel: “Hi David, Just checking in if you could provide the confidential data deck for MODA? We’re eager to dig in.”

41. That same day, Dr. Spiegel uploaded a confidential PowerPoint deck to a private Dropbox.com folder for RA Capital’s confidential review. This confidential PowerPoint contained detailed information on [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Three individuals at RA Capital were given confidential access to the folder, Dr. Deshpande, Mr. Dake, and Ms. Moraueu, and each accessed the folder and impermissibly shared the MODA Trade Secrets with others.

42. Following receipt of Dr. Spiegel's information, RA Capital's Dr. Deshpande expressed a significant interest in the MODA platform and scheduled a follow-up meeting. On April 24, 2019, Dr. Spiegel and Dr. Deshpande met to discuss Dr. Spiegel's trade secret information. After this meeting, Dr. Spiegel confidentially shared additional information with RA Capital via Dropbox.com, and on April 25, 2019, uploaded the degrader structures (**Exhibit 5**), liver toxicity data, and additional *in vivo* data (**Exhibit 6**). The following day, April 26, 2019, RA Capital requested clarification on specific degrader structures and indicated that liver toxicity data cells in the spreadsheet were corrupted, preventing them from displaying the appropriate information in spreadsheet. RA Capital wrote:

[REDACTED]

**Exhibit 7.** On April 29, 2019, Dr. Spiegel responded to RA Capital, stating he "just uploaded a spreadsheet into the dropbox that contains a number of targets and disease indications that I've

been contemplating. This is by no means a comprehensive list, but may prove useful in your efforts.” **Exhibit 8.** This matrix provided RA Capital with highly confidential pipeline information, including priority, disease, target, and evaluation status. RA Capital confirmed receipt of the spreadsheet on April 29, 2019. *Id.* Dr. Spiegel later uploaded additional degrader structures (**Exhibits 9–10**) into the confidential Dropbox folder with relevant explanations and labels as requested by RA Capital.

43.

14

[REDACTED]

[REDACTED]

44. On May 8, 2019, Dr. Deshpande had dinner with Dr. Spiegel, after which Dr. Deshpande emailed Dr. Spiegel requesting additional confidential information: “[REDACTED]

[REDACTED]

45. On May 10, 2019, RA Capital circulated internally a published article from Dr. Craig Crews on extracellular degradation using ENDTACS, which is different from Dr. Spiegel’s MODA molecules. [REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] That same day, May 10, 2019, Dr. Deshpande again emailed Dr. Spiegel to ask about the Crews's paper, and to request more information about MODA: "We have some questions on MODA chemistry [REDACTED]

[REDACTED] **Exhibit 25** (DEFS00030907).

46. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This correspondence shows that Dr. Spiegel took reasonable measures to protect the confidentiality of the MODA trade secrets, including restricting permissions on who could access his confidential Dropbox folder.

47. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Yale University was

awarded U.S. Patent No. 11,767,301, directed to MODA compounds in 2023. **Exhibit 32** (DEFS00094094).

48. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Mr. Dake later emailed Dr. Spiegel requesting additional confidential information:

[REDACTED]

**Exhibit 11.** In response, Dr. Spiegel provided RA Capital with the [REDACTED]

[REDACTED]

[REDACTED] *Id.*

49. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

50. On May 29, 2019, RA Capital requested specific technical and confidential information (**Exhibit 12**), and in response, Dr. Spiegel provided RA Capital more trade secret information on June 5, 2019, including [REDACTED] **Exhibit 13** [REDACTED]

[REDACTED]

[REDACTED]

51. On June 6, 2019, RA Capital requested specific technical and confidential information (**Exhibit 14**) after which Dr. Spiegel spoke with Dr. Deshpande to provide additional trade secret information. As a follow up to their call, on June 13, 2019, Dr. Spiegel sent RA Capital a control image for MODA-003. **Exhibit 15**. The title of the picture was [REDACTED]

[REDACTED]

52. On June 17, 2019, Dr. Spiegel had dinner with Dr. Deshpande (**Exhibit 16**), and on June 18, 2019, Dr. Spiegel uploaded his confidential and trade secret U.S. Provisional Patent Application Nos. 62/655,055 and 62/788,040 into the confidential Dropbox.com folder. **Exhibit 30** (DEFS00095899); *see also* **Exhibit 31** (DEFS00096694). The U.S. Patent Act requires the

U.S. Patent and Trade Office to keep patent applications in confidence. 35 U.S.C. § 122.  
 (“applications for patents shall be kept in confidence by the Patent and Trademark Office . . .”).

53. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

54. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>1</sup> [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

55. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] On July 1, 2019, Dr. Spiegel attended a meeting at RA Capital.

56. On July 3, 2019, following the in-person meeting with Dr. Spiegel, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

57. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>2</sup> [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*Id.* [REDACTED]

[REDACTED] *Id.*

58. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*Id.* [REDACTED]

[REDACTED]

59. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

60. [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

61. [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

62. After further back-and-forth communications between RA Capital and Dr. Spiegel, on August 14, 2019, Dr. Spiegel emailed RA Capital with a counter-offer.

63. On August 19, 2019, RA Capital rejected Dr. Spiegel's counter-offer, ending the negotiations between the parties. Dr. Spiegel acknowledged the negotiations between RA Capital and Spiegel terminated on August 22, 2019. **Exhibit 17.** This termination ended "[REDACTED] [REDACTED] between Yale and RA Capital, and RA Capital therefore had no legitimate purpose for retaining the MODA Trade Secrets after the date of termination. **Exhibit 1 at § 8.**

64. From the time RA Capital first reached out to Yale in an attempt to meet with Dr. Spiegel in February 2019 until August 22, 2019, no one at RA Capital had ever suggested to Dr. Spiegel or Yale that the MODA technology was not novel or that Dr. Spiegel's MODA technology was already known.

## RA Capital Focuses on Launching a Company Focused on Extracellular Degraders

65. After terminating its negotiations with Yale, and having accessed the MODA Trade Secrets, members of RA Capital formed a new company in stealth mode to develop and commercialize Dr. Spiegel's MODA Trade Secrets as their own. RA Capital and its members simply stole Dr. Spiegel's work.

66.

25

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### **RA Capital's Formation of Avilar**

67. On December 6, 2019, RA Capital and its members formed Avilar as a Delaware corporation, naming Dr. Deshpande and Dr. Resnick as directors and board members, and naming Daniel Grau as the Chief Executive Officer and a board member.

68. On January 4, 2020, Avilar registered to do business in the State of Massachusetts, naming RA Capital's address at 200 Berkeley Street, 18<sup>th</sup> Floor, Boston, MA, 02116, as its principal place of business, identifying Dr. Deshpande as the President, and identifying Dr. Deshpande and Dr. Resnick as two of the three directors of the new company. **Exhibit 18.** On January 13, 2020, a company called Apex Technology group obtained the "avilar-tx.com" domain name, which is currently the domain for Avilar's now public website.

69. Upon information and belief, even before the formation of Avilar, RA Capital members, including Dr. Deshpande, used the MODA Trade Secrets to assist or accelerate research of extracellular targeted protein degraders, including as a benchmark against which to test and fine-tune their work. Through Defendants' unauthorized use of the MODA Trade Secrets, all in violation of the 2019 Agreement, Defendants have been able to use the MODA Trade Secrets to generate capital and significantly accelerate and shortcut the development cycle. [REDACTED]

[REDACTED]

[REDACTED]

70. In addition, upon information and belief, even before the formation of Avilar, RA Capital members hired a patent attorney, Brent R. Bellows, Ph.D. (currently at Knowles Intellectual Property in Atlanta, Georgia), who drafted and filed U.S. provisional patent applications based on the MODA Trade Secrets. Several employees at RA Capital are named as inventors on these patents, including Dr. Chen, who joined RA Capital in 2019 as an entrepreneur-in-residence and co-founded Avilar, and Soumya Ray, who was an entrepreneur-in-residence at RA Capital, and Dr. Deshpande, who is named as an inventor on WO 2022/035997. Avilar was named the official applicant of these patent applications.

71. Plaintiffs only learned about these patent applications when they first began to publish, the first of which published on August 5, 2021. For example, U.S. Provisional Patent Application 63/063,015, titled “ASPGR-Binding Compounds for the Degradation of Extracellular Proteins,” became accessible with the publication of WO 2021/1553317 on August 5, 2021, and appears to have been filed on August 7, 2020, and U.S. Provisional Patent Application 63/064,377, titled “In Vivo Assembly of ASGPR binding Therapeutics,” became accessible with the publication of WO 2022/035997 on August 11, 2021, and appears to have been filed on August 11, 2020. RA Capital also appears to have filed U.S. Provisional Patent Application 62/968,802, titled “ASPGR-Binding Compounds for the Degradation of Extracellular Proteins” on January 31, 2020, which became accessible on August 5, 2021. These patent applications incorporated Dr. Spiegel’s MODA Trade Secrets, and Defendants disclosed them in the applications as their own. Furthermore, upon information and belief, Defendants’ ability to draft and file these patent

applications was significantly accelerated by Defendants' unauthorized and improper use of the MODA Trade Secrets.

72. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### **Avilar Launches Publicly**

73. In November 2021, Avilar launched its website falsely asserting that Avilar discovered the MODA platform. For example, Avilar created an alternative name for Dr. Spiegel's MODA molecules, calling them ATACs, or ASGPR Targeting Chimeras, and stating on its website: "Our drug discovery platform enables the modular design and assembly of ATACs to target diverse proteins." **Exhibit 2.** This was Dr. Spiegel's platform. In a November 18, 2021 press release, Avilar stated:

Avilar Therapeutics, a biopharmaceutical company focused on extracellular protein degradation, today announced a \$60 million seed financing from founding investor RA Capital Management. Avilar is creating a novel class of protein degrader therapeutics designed to target disease-causing extracellular proteins, extending the reach of protein degradation beyond initial degraders that target intracellular proteins. . . .

"We believe the universe of extracellular proteins represents the next frontier in protein degradation and we are excited to launch Avilar as a pioneer company in this new space," said Daniel Grau, CEO, and President of Avilar Therapeutics. "Avilar has demonstrated in vivo proof-of-concept of ATAC-mediated protein degradation in both rodent and nonhuman primate studies, and we look forward to advancing ATACs as novel medicines to degrade

proteins involved in the pathogenesis of a wide range of human diseases.”

**Exhibit 19.**

74. Defendants never disclosed that they had prior knowledge of the MODA Trade Secrets until Dr. Spiegel disclosed his confidential research information to Defendants in 2019 pursuant to the 2019 Agreement. During the meetings with Dr. Spiegel and Yale in 2019, RA Capital did not indicate it knew anything about the possibility of using bi-functional molecules containing an ASGPR-binding moiety to harness the body’s own machinery to degrade targeted extracellular proteins. Indeed, that was the basis for its interest in funding Dr. Spiegel’s work. Defendants learned about the MODA platform and ASGPR-binding compounds from Dr. Spiegel’s confidential disclosure to RA Capital between April and August 2019.

75. Upon information and belief, Avilar was created based on the stolen information RA Capital took from Dr. Spiegel and Yale during the April through August 2019 negotiation of a funding deal. Dr. Deshpande collected MODA Trade Secrets over a period of months, and used that information to start a new company focused on commercializing Dr. Spiegel’s and Yale’s MODA technology in breach of the 2019 Agreement and in violation of the Defend Trade Secrets Act of 2016.

**RA Capital’s Misappropriation of Trade Secrets**

76. RA Capital knew that when Dr. Spiegel and Yale shared the MODA Trade Secrets with RA Capital, this information was shared under circumstances giving rise to a duty to maintain the secrecy of the trade secrets or to limit the use of the trade secrets. In particular, RA Capital and Yale signed the 2019 Agreement requiring RA Capital to keep Yale’s MODA Trade Secrets confidential and restricting RA Capital’s use of the information.

77. Neither Yale, Dr. Spiegel, nor Biohaven expressly or impliedly authorized RA Capital to use the MODA trade secret information to assist or accelerate Defendants' own research and development of extracellular targeted protein degraders. Neither Yale, Dr. Spiegel, nor Biohaven expressly or impliedly authorized RA Capital to disclose the MODA trade secret information to third party investors, lawyers, and others. Neither Yale, Dr. Spiegel, nor Biohaven expressly or impliedly authorized RA Capital to use the MODA trade secret information in the formation of a company to commercialize ASGPR-binding compounds for extracellular protein degradation. Neither Yale, Dr. Spiegel, nor Biohaven expressly or impliedly authorized RA Capital to use the MODA trade secret information to raise \$75 million to fund a competing company commercializing products based on Yale's MODA Trade Secrets. Neither Yale, Dr. Spiegel, nor Biohaven expressly or impliedly authorized RA Capital to use Yale's trade secret information to file patent applications on Yale's MODA platform.

78. On information and belief, Defendants used and are using the MODA Trade Secrets to unjustly enrich Defendants and enhance the commercial value of Avilar. In addition, on information and belief, Defendants improperly used the trade secrets, including extensive data and other materials provided by Dr. Spiegel, to assist or accelerate the research and development of extracellular targeted protein degraders, resulting in millions of dollars of cost savings. On information and belief, Defendants' misappropriation of the MODA Trade Secrets is ongoing and directly causing harm to Plaintiffs.

### RA Capital's Breach of the 2019 Agreement

79. In the 2019 Agreement, RA Capital agreed that scientific, technical and product information about the MODA platform disclosed by Dr. Spiegel and Yale constituted confidential information under the 2019 Agreement. *See, e.g., Exhibit 1* at § 2.

80. Dr. Spiegel and Yale identified the information disclosed to RA Capital between April 2019 and August 2019 as confidential, including Excel spreadsheets with Dr. Spiegel's target protein pipeline and disease matrix, chemical structures of degraders, and emails. The material shared by Dr. Spiegel to RA Capital is covered and protected by the 2019 Agreement.

81. Avilar's provisional patent applications improperly relied on information disclosed to RA Capital under the terms of the 2019 Agreement, and thereby ignored the 2019 Agreement. For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

82. On information and belief, RA Capital and Dr. Deshpande violated the 2019 Agreement and disclosed MODA information to employees beyond those needed to evaluate a possible business arrangement with Yale, including members at RA Capital who later founded Avilar. For example, Dr. Spiegel disclosed his MODA Trade Secrets to Dr. Deshpande, Mr. Dake, and Ms. Moraeu in 2019, but when Avilar filed PCT/ US2021/015939, it named other individuals not authorized to see Dr. Spiegel's shared information pursuant to the 2019 Agreement. By disclosing Dr. Spiegel's MODA Trade Secrets to the public through its PCT application, Defendants violated the 2019 Agreement, but even before that, by disclosing the trade secrets to other named inventors, Defendants violated the 2019 Agreement. Plaintiffs did not learn of these



breaches of the 2019 Agreement and Defendants' misappropriation of the MODA Trade Secrets until the publication of Defendants' patents.

83. On information and belief, Defendants disclosed the MODA Trade Secrets to unauthorized individuals inside and outside RA Capital.

84. On information and belief, Defendants improperly used the MODA Trade Secrets, including extensive data and other materials provided by Dr. Spiegel, to assist or accelerate the research and development of extracellular targeted protein degraders.

85. On information and belief, Avilar improperly incorporated Yale's confidential trade secret information, including the MODA platform and ASGPR-binding compounds, into its therapeutic development strategy, thereby breaching the 2019 Agreement.

#### **Biohaven's License of the Yale Technology**

86. On July 8, 2020, Yale entered a MODA Patent Cross License Agreement with Kleo Pharmaceuticals, Inc. In January 2021, Biohaven acquired Kleo Pharmaceuticals, Inc., acquiring its interest in Yale's MODA technology. On January 4, 2021, Biohaven licensed Yale's MODA platform, obtaining all substantial rights in Yale's patents directed to the MODA platform.

**Exhibit 4.** Biohaven lawfully possesses the MODA Trade Secrets by virtue of its license agreement with Yale, which is covered by the licensed information and licensed materials provided by Yale to Biohaven.

#### **COUNT I: MISAPPROPRIATION OF TRADE SECRETS UNDER THE DEFEND TRADE SECRETS ACT OF 2016 (18 U.S.C. § 1836)**

87. Plaintiffs incorporate by reference and reallege the foregoing paragraphs of the Complaint as though fully restated herein.

88. This action arises under the Defend Trade Secrets Act of 2016, codified at 18 U.S.C. § 1836, et seq. which prohibits threatened and actual misappropriation of trade secrets.

89. Plaintiffs own or have license to valuable confidential information and trade secrets, including, but not limited to the MODA Trade Secrets. Yale has spent hundreds of thousands of dollars developing the MODA Trade Secrets, and Plaintiffs have spent millions of dollars developing technology based on the MODA Trade Secrets.

90. Defendants gained restricted access to Plaintiffs' confidential information and trade secrets, including, but not limited to, over the course of a business relationship between RA Capital and Yale whereby the parties negotiated a potential funding arrangement from April 2019 through August 2019, and RA Capital was and is under an obligation to maintain the secrecy of Yale's information.

91. This confidential trade secret information included, but was not limited to, technical details regarding Dr. Spiegel's MODA technology, testing parameters and results from Dr. Spiegel's lab, information about potential future experiments involving the MODA technology, and provisional Yale patents.

92. RA Capital and Avilar knew they had an obligation to maintain the secrecy of the MODA Trade Secrets due, in part, to the 2019 Agreement, and because Yale identified documents it provided to RA Capital as confidential.

93. Upon termination of the negotiations between Yale and RA Capital, the Parties' relationship ended and RA Capital had no legitimate purpose for retaining the MODA Trade Secrets.

94. RA Capital misappropriated the MODA Trade Secrets by using the information to assist and accelerate the research and development of Defendants' own competing technology,

filing patent applications on the MODA platform, and funding the creation of Avilar, whose main objective is to develop the MODA platform for its own commercial purposes. RA Capital also disclosed the MODA Trade Secrets to third parties without authorization from Yale. The theft of Plaintiffs' MODA Trade Secrets has resulted in Avilar saving costs in the development of competing technology and has increased Avilar's productivity. Defendants are also using Plaintiffs' trade secrets in order to enhance the commercial value of Avilar and unjustly enrich Defendants. In particular, based on the theft of Plaintiffs' MODA Trade Secrets, Defendants were able to save millions of dollars in research and developments costs. Furthermore, based on the theft of the MODA Trade Secrets, Avilar secured \$75 million in funding from RA Capital and others, indicating that Plaintiffs' trade secrets are worth at least \$75 million.

95. Plaintiffs have suffered and continue to suffer damages as a result of Defendants' misappropriation, including loss of business value. Furthermore, Defendants have been unjustly enriched as a result of their misappropriation of Plaintiffs' trade secrets.

96. Defendants' appropriation of Plaintiffs' trade secrets was and is willful and malicious within the meaning of 18 U.S.C. § 1836(b)(3)(C)–(D).

97. Through its actions, Defendants have caused and continue to cause Plaintiffs immediate and irreparable harm for which Plaintiffs have no adequate remedy at law. Upon information and belief, Defendants' unlawful conduct alleged herein continues, and there is no indication that it will refrain from continuing such activity in the future. Defendants will continue such wrongful conduct unless enjoined for at least the period of time equal to the time from when Defendants' stole the MODA Trade Secrets until that information became available to the public through lawful means.

98. Accordingly, Plaintiffs are entitled to (a) recover their actual loss and the unjust enrichment of Defendants not taken into account in calculating its actual loss; (b) receive exemplary damages; (c) receive reasonable attorneys' fees; and (d) an injunction regarding Defendants' use of Plaintiffs' trade secrets, including the use or sale of any product or technology derived from Plaintiffs' trade secrets. In the alternative to any of the above, Plaintiff is entitled to a reasonable royalty for Defendants' misappropriation of Plaintiffs' trade secrets.

**COUNT II:  
BREACH OF CONTRACT**

99. Yale incorporates by reference and realleges the foregoing paragraphs of the Complaint as though fully restated herein.

100. The 2019 Agreement is valid and enforceable, and Yale has performed its duties under the 2019 Agreement. Defendant RA Capital voluntarily entered into the 2019 Agreement as a prerequisite to a business opportunity and relationship with Yale.

101. The 2019 Agreement prohibited RA Capital from using or disclosing Yale's confidential information in an unauthorized manner. The restrictions set forth in the Agreements are reasonable and necessary to protect Plaintiffs' legitimate business interests and employment relationships. The restrictions in the Agreements limit RA Capital's use and disclosure of Yale's confidential information.

102. Through its actions, described in the paragraphs above and including but not limited to RA Capital's use of Yale's confidential, proprietary, and trade secret information, RA Capital has breached and continues to breach the express terms of the 2019 Agreement that they voluntarily signed. RA Capital is unjustly enriched by the breach of the 2019 Agreement, including by saving the cost of researching and developing their own technology, and increasing the value of Avilar, to which RA Capital has made a significant investment.

103. Yale has suffered and continues to suffer damages as a result of RA Capital's breach of its contractual obligations not to use or disclose Yale's confidential information, for which it seeks recovery herein.

**COUNT III:  
DELAWARE UNIFORM TRADE SECRET ACT**

104. Plaintiffs incorporate by reference and reallege the foregoing paragraphs of the Complaint as though fully restated herein.

105. This action arises under the Delaware Uniform Trade Secret Act ("DUTSA"), codified at 6 *Del. C.* § 2001, *et seq.* which prohibits threatened and actual misappropriation of trade secrets.

106. Plaintiffs own or have licenses to valuable confidential information and trade secrets, including, but not limited to the MODA Trade Secrets. Yale has spent hundreds of thousands of dollars developing the MODA Trade Secrets, and Plaintiffs have spent millions of dollars developing technology based on the MODA Trade Secrets

107. Defendants gained restricted access to Plaintiffs' confidential information and trade secrets, including, but not limited to, over the course of a business relationship between RA Capital and Yale whereby the parties negotiated a potential funding arrangement from April 2019 through August 2019 and RA Capital was and is under an obligation to maintain the secrecy of Yale's information.

108. This confidential trade secret information included, but was not limited to, technical details regarding Dr. Spiegel's MODA technology, testing parameters and results from Dr. Spiegel's lab, information about potential future experiments involving the MODA technology, and provisional Yale patents.

109. RA Capital and Avilar knew they had an obligation to maintain the secrecy of the MODA Trade Secrets due, in part, to the 2019 Agreement, and because Yale identified documents it provided to RA Capital as confidential.

110. Upon termination of the negotiations between Yale and RA Capital, the Parties' relationship ended and RA Capital had no legitimate purpose for retaining the MODA Trade Secrets.

111. RA Capital misappropriated the MODA Trade Secrets by using the information to assist and accelerate the research and development of Defendants' own competing technology, filing patent applications on the MODA platform, and funding the creation of Avilar, whose main objective is to develop the MODA platform for commercial purposes. RA Capital also disclosed the MODA Trade Secrets to third parties without authorization from Yale. The theft of Plaintiffs' MODA Trade Secrets has resulted in Avilar saving costs in the development of competing technology and has increased Avilar's productivity. Defendants are also using Plaintiffs' trade secrets in order to enhance the commercial value of Avilar and unjustly enrich Defendants. In particular, based on the theft of Plaintiffs' MODA Trade Secrets, Defendants were able to save millions of dollars in research and developments costs. Furthermore, based on the theft of the MODA Trade Secrets, Avilar secured \$75 million in funding from RA Capital and others, indicating that Plaintiffs' trade secrets are worth at least \$75 million.

112. Plaintiffs have suffered and continue to suffer damages as a result of Defendants' misappropriation, including loss of business value. Furthermore, Defendants have been unjustly enriched as a result of their misappropriation of Plaintiffs' trade secrets.

113. Defendants' misappropriation of Plaintiffs' trade secrets was and is willful and malicious within the meaning of 6 *Del. C.* §§ 2003–04.

114. Through its actions, Defendants have caused and continue to cause Plaintiffs immediate and irreparable harm for which Plaintiffs have no adequate remedy at law. Upon information and belief, Defendants' unlawful conduct alleged herein continues, and there is no indication that it will refrain from continuing such activity in the future. Defendants will continue such wrongful conduct unless enjoined for at least the period of time equal to the time from when Defendants' stole the MODA Trade Secrets until that information became available to the public through lawful means.

115. Accordingly, Plaintiffs are entitled to (a) recover their actual loss and the unjust enrichment of Defendants not taken into account in calculating its actual loss; (b) receive exemplary damages; (c) receive reasonable attorneys' fees; and (d) an injunction regarding Defendants' use of Plaintiffs' trade secrets, including the use or sale of any product or technology derived from Plaintiffs' trade secrets. In the alternative to any of the above, Plaintiff is entitled to a reasonable royalty for Defendants' misappropriation of Plaintiffs' trade secrets.

### **JURY DEMAND**

116. Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs hereby demands a jury trial on all claims so triable herein.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs respectfully request the following relief:

1. Award damages in an amount to be proved at trial, including without limitation, contractual and tort damages, loss caused by misappropriation, and the unjust enrichment caused by misappropriation that is not taken into account in computing actual loss;
2. Award exemplary damages based on Defendants' willful and malicious actions;

3. Award Plaintiffs its attorneys' fees, its costs, and interest;
4. Grant injunctive relief preventing Defendants from further disclosing and using Plaintiffs' confidential information or trade secrets and from enforcing any intellectual property based on Plaintiffs' trade secrets; and
5. Grant such other and further relief as this Court deems equitable, just, and proper.

Dated: April 5, 2024

**MORRIS JAMES LLP**

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